Winter and summer grazing. Fine wool sheep predominate on the ranges and grazing areas. The range herds spend the summers on the high altitude ranges in the mountainous sections of the central portion of the state and migrate each fall distances varying from 50 to 300 miles to the desert ranges in the eastern, southern, and western portion of the state.

Sheep are now using the larger portion of the desert ranges and more than half of the summer ranges. In addition to this area Utah sheep are using some ranges in adjoining states. This latter usage, however, is offset almost entirely by the use of Utah ranges by sheep from adjoining states.



Figure 77-Utah mountain ranges are ideal for grazing.

The open desert makes the handling of large herds practicable in winter while the timbered, mountainous summer ranges make the smaller bands more desirable. The mature, hardy plant growth of the desert is also less susceptible to injury from the larger bands than the tender, succulent summer forage.

On the desert, sheep are kept moving to fresh range while during the lambing season and on the summer ranges it is desirable not to permit the use of the same bed ground more than two or at most three nights in succession.

Breeds. In recent years the fine wool sheep have yielded to some extent to mutton types of English origin. This is true especially where farm flocks are being established, and it is likely that the English breeds will become more prominent in the Utah sheep industry with an increase in the number of farm flocks.

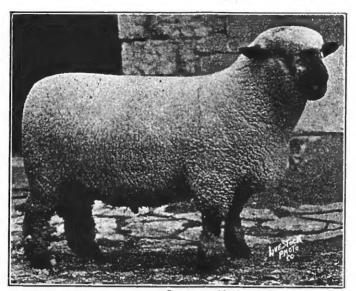
The introduction of the mutton breeds and their influence on wool and lamb production has presented a problem in the state concerning the relative advantages of fine wool sheep and crossbreds for range sheep production. Wool has always held an important place in the sheep business, and sheepmen who have been interested primarily in fine wool production will need to decide whether they can continue to compete successfully without resorting to

crossbreeding practices in order to secure a mutton type of feeder lamb and

at the same time produce a combing wool.

A comparison of crossbreds and fine wool sheep based on the opinions of some of the leading Utah breeders indicates that crossbreds are larger, more prolific breeders, and better mothers; that they produce a better type of feeder lamb, a lighter shrinkage wool, a higher percentage of combing wool, and that they are better "rustlers" on the range.

The comparison indicates, however, that the crossbreds are shorter lived than Rambouillets, lose considerably more wool on brush, and do not hold fleece well when past three years of age; that crossbred ewe lambs must be sold as feeders and ewes bought for replacements, and that the crossbreds



Courtesy National Wool Grower.
FIGURE 78—A champion Hampshire ram.

are more difficult to herd than Rambouillets. Inquiries have also shown that the crossbreds are not as hardy, suffer heavier losses, and are harder on the range. It is claimed they produce less wool and that fleeces are too loose and too light in weight, and that it is impossible to maintain standards of breeding and uniform wool grades.

Length of life, density and quality of fleece, use of range, standard of breeding and herding instincts being important considerations in

range sheep industry, it is generally considered best to hold to the fine wool breed and attempt to improve the type of feeder lambs by breeding for a smoother, thicker-set type where sparse ranges prohibit the production of milk fat lambs. These improvements, along with the culling of ewes with low wool production, are considered factors that should produce the best type of sheep for Utah's range industry.

Shearing. Range sheep are shorn either at small privately owned shearing plants or at cooperative or company plants located between the winter and summer ranges, usually nearer the winter range. The shearing season in Utah is from April to June while most sheep are sheared in May.

The common practice in Utah is to shear before lambing. The advantages of this practice are the saving of wool from brushing on sage and oak on the lambing ranges, a lighter shrinkage with less tag lock wool, the possibility of shearing during migration from winter to summer ranges, the closer proximity to shipping points, and the greater ease in lamb suckling through the removal of the wool.

Disadvantages of this method are listed as heavier losses in case of cold storms following shearing, losses of lambs due to rough handling at shearing time, a lighter fleece weight due to lack of yolk which develops with the warmer weather, and loss in weight and even death loss due to lack of feed

at most of the large shearing corrals.

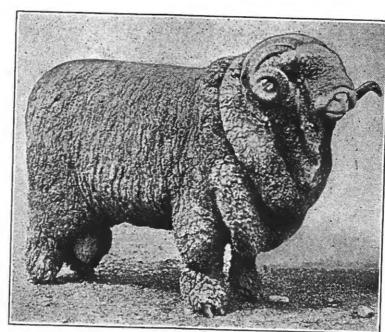
The shearing plants of Utah taken as a whole are not yet suitable for handling wool in a manner justified by the size and importance of the wool crop, although shearing practices have been modified favorably in several instances. At the present time there is a renewed interest in the better preparation of wool for market, and the increased emphasis on quality as a factor in marketing is stimulating interest in more efficient shearing plants.

BEEF CATTLE

Cattle were brought into the state by the early pioneers, but the first animals of recognized beef breeding were introduced into Utah by overland

emigrant trains in 1849 and 1850. Animals of good breeding, but so weak and foot sore that they could not continue the trip to the Western Coast, were traded to Utah farmers for provisions. Thus Utah obtained good cattle far earlier than otherwise would have been the case.

Breeds. As early as 1880 and 1890 all the ranges were fully occupied and it is estimated that there were then 160,000 cattle in the state largely of the Shorthorn, Devon, and Hereford breeds in



Courtesy National Wool Grower. FIGURE 79-A champion Rambouillet Ram, the breed for which Utah is famous.

various crosses with the Longhorns. Owing to the close proximity of small irrigated farms and range country, conditions have been favorable to the development and use of Shorthorn cattle, although the Hereford breed, due to its natural hardiness and rustling ability, today predominates on the ranges of Utah as it does on those of surrounding range states.

Although today the general standard in excellence in range cattle for the state as a whole is hardly on a par with sheep, there are several sections, notably in the northern, eastern, and southern parts of the state, where the quality of beef cattle produced is as high as that of cattle produced in most

sections of the country.

Crossbreeding has been carried on to some extent in the state for the express purpose of increasing size and bone of the range herd. The crossing of recognized standard beef breeds will undoubtedly help to develop a desirable beef type, yet the steady development of the individual breeds has largely eliminated the former weak points of each breed. Furthermore, the a. selected sires from a single breed tends to improve the unite formation and color, both important considerations from a mit, point.

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Feeding. Beef cattle as well as range sheep in Utah are suon the high mountain ranges of the state. They are winteres other range with or without supplementary feeds according to range conditions. It is estimated that only two per cent of Washington County and five per cent of the cattle of Kan. winter fed, and these receive only one-half ton of hay per hear. two months of the year while all of the cattle of Cache, N Sanpete, Summit, and Wasatch counties are fed for a period .

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FIGURE 80-Typical sheep-shearing plant, Iron County, Utah,

to six months and receive from one to one and one-half tons of hay per head in addition to what grazing they may do.

Although some steers and cows are shipped fat off the summer ranges, the majority of Utah's cattle are sold as feeders in the fall. During recent years there has been a tendency to market younger cattle where quality will It is a well recognized fact that younger animals wake more economical gains than older animals. This fact together with the increased demand for lighter cuts of meats adds incentive to the desire to produce better quality cattle and market them at an earlier age.

Management. The semi-arid climate, rugged ranges, and tallier severe winters in Utah require careful attention to management plans it maximum returns are to be secured in the beef cattle business.

Some of the points stressed by successful range cattlemen in attempting to secure the highest possible calf drop are, number and quality of sures, control of the breeding season, conditioning of bulls and maintenance of vitality of all breeding stock, shipment of all dry cows over three year, of age, segregation of the steers and breeding herd.

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Feeding. Beef cattle as well as range sheep in Utah are summered largely on the high mountain ranges of the state. They are wintered on desert or other range with or without supplementary feeds according to climatic and range conditions. It is estimated that only two per cent of the cattle of Washington County and five per cent of the cattle of Kane County are winter fed, and these receive only one-half ton of hay per head during but two months of the year while all of the cattle of Cache, Morgan, Rich, Sanpete, Summit, and Wasatch counties are fed for a period of from four



FIGURE 80-Typical sheep-shearing plant, Iron County, Utah.

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